**Textbook:** Geometry; Larson, Boswell, and Stiff. *McDougal Littell.* 2004.

**Course Description:** This course will thoroughly cover the basics of geometry including inductive reasoning, an introduction to mathematical proof, perpendicular and parallel lines, congruent triangles, properties of triangles, quadrilaterals, similarity of figures, right triangles and trigonometry, circles, areas of polygons and circles, surface area and volume, and transformations.

**Course Objectives and Student Learning Outcomes:**

Upon completion of this course, you will be able to confidently state the following:

* I can demonstrate geometrical reasoning using inductive and deductive reasoning.
* I can use geometrical symbols to express relations between figures and to identify figures.
* I can demonstrate problem solving ability using symbolic representation and manipulation.
* I have the ability to solve a variety of geometrical problems using concepts gained from algebra and applied to the study of Euclidean geometry.
* I understand the basics behind formal proof writing and can produce a proof shell.

\*\*\* There will also be daily objectives for each lesson, that when composed together, will help to build the skills necessary for the learner outcome described above.

**Course Requirements:** You are expected to be present, attentive, and participate during lecture, including taking notes. You are also expected to complete homework to the best of your ability, and to take and pass all exams and quizzes.

**Instructional Strategies:** Lecture will be the primary form used for instruction in this class. Each day, students will be given a set of guided notes which will help organize the lesson’s content. In-class activities as well as lab days using Geometer’s Sketchpad will us utilized from time to time. Hayfield’s Moodle site will be utilized as a central location for all classroom activities and uploads of podcasts and blank copies of notes.

**Classroom Materials:** Materials you are expected to bring every day to class include a writing utensil, your textbook, your notes, a three-ring binder, a notebook or loose-leaf paper, and a **calculator**. I have a limited number of calculators so if you do not have one, I cannot guarantee that you will receive one. Math done in pencil is always preferred to pen, as pen can become sloppy.

**Grading Information:** Grading will conducted following the high schools 90% summative/ 10% formative scale.

* ***Summative grades*** consist of exams, quizzes, and any high-level projects that I assign that have students’ demonstrate comprehensive knowledge at the end of an instructional unit. All chapter exams will be weighted the same, regardless or point total. A final exam, given each semester, will also be part of the student’s summative grade.
* ***Formative grades*** consist of homework points, daily check-ins, or other tasks assigned by me. Formative grades are assessments that are completed while students are still learning the material.

**Grading Scale:**

|  |  |  |  |
| --- | --- | --- | --- |
| Letter Grade | Percentage | Letter Grade | Percentage |
| A | 100%-94% | A- | 93%-90% |
| B+ | 89%-87% | B | 86%-84% |
| B- | 83%-80% | C+ | 79%-77% |
| C | 76%-74% | C- | 73%-70% |
| D+ | 69%-67% | D | 66%-64% |
| D- | 63%-60% | F | 59%-0% |

 *What does this mean?* A, A- = Exemplary Work (90-99% Mastery of Subject Goals)
 B+, B, B- = Proficient Work (80-89% Mastery of Subject Goals)
 C+, C, C- = Acceptable Work (70-79% Mastery of Subject Goals)
 D+, D, D- = Mediocre Work (60-69% Mastery of Subject Goals)
 F = Unacceptable Work (less than 59% Mastery of Subject Goals)

**Guidelines about homework:** You cannot learn mathematics and become better at it unless you do the homework. Homework will be graded rarely in this class, so it is key that you complete your homework to the best of your ability and ask questions on any material you do not understand. It is to your advantage to not fall behind on homework administered and come see me if you have questions or need clarifications. The most rewarding part of my job is helping you understand concepts that may challenge you!

**Exams and Quizzes:** There will usually be two quizzes given per new chapter of material. This will give you a chance to demonstrate what you have learned while still in the forming stages of learning the new material. This will also give you insight into what types of questions are most important for the upcoming test! You will be allowed to retake quizzes and tests but on your own time upon appointment with me (e.g. study hall, before or after school.) You cannot retake during class time, unless you have completed all current work and have permission from the classroom teacher.

**Geometer’s Sketchpad:**  In addition to watching lessons and completing homework, we will also be working with a program called Geometer’s Sketchpad. This is an interactive geometry tool that will allow you to visually see and manipulate geometry in real time. These activities will only be done in class.

**Podcasts:** For each day’s lesson, I will upload a podcast as well as a copy of the notes at the end of the school day for students who are gone from class. This will be a part of my every day duties in order to make sure students who are gone on vacation or ill do not get far behind in class. There is no excuse to come to me and ask to explain a concept missed from scratch when it can be found online. However I will be more than happy to answer any question you have once you have watched the podcast.

**Class Webpage:** Our class website will [www.hayfieldmoodle.com](http://www.hayfieldmoodle.com). You can get to the Calculus class page by simply clicking “Math” on the home screen and then “Calculus”. Here you can find blank copies of the notes as well as podcasts and other important classroom materials like a copy of our course’s syllabus.

Classroom Expectations and Behavior

1. **Respect myself (the teacher), other classmates, and classroom materials.** This will make the classroom environment a positive environment and one were everyone can feel safe, comfortable, and have the ability to learn.
2. **Be ready and prepared to learn.** This involves being in your seat before the bell rings, and bringing all necessary materials with you to class. This also involves doing your part outside of the classroom to put yourself in the best position to succeed.
3. **Rules and policies of the school district will be enforced.** These are common knowledge for students who care to know them, and can be found in the student handbook.
4. **Have a positive attitude and always try your best.** I cannot guarantee a lot of things, but one thing that I can guarantee, is that if you put your best effort in and have a positive attitude, that will go a long way in you being successful in this class.
5. **You can expect me to fair, organized, and positive about this class and your involvement in it.**. I want to be involved in the learning process along with you and mathematics is the vehicle I chose to do so. Working with students, like yourself, is what I enjoy doing.

One last rule that really should not have to be mentioned but will be…
- You may call me “Mr. Dosdall” or if you feel so inclined, “Coach” as I will have a few of you in various sports. You may not call me “Dosdall”, “Bro”, “Dude” or whatever variation of these that you may feel inclined to come up with. I will immediately correct you.

**Make-Up Policy** I understand that you, and the student population, will most likely be gone for activities, illnesses, family vacations, or other reasons. Having podcasts posted online should alleviate any of the stress of missing class since you will be able to watch the uploaded lesson that night after the day’s class. However, for quizzes or exams, unless you miss the day before an exam or quiz (or the day of), you will be expected to take the exam or quiz on the day everyone else is. **Important: It is your responsibility to see me for any assignment missed. It is not my responsibility to remember who has and has not been in class and received the homework.**

**Lastly, I reserve the right to add/change any of these guidelines on an individual basis.**